Find a Rule – Two Step

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Introduction

What two things could be happening to the numbers in the function machine?

	?	?
10	→	15
6	→	7
25	→	45

Y6

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Varied Fluency 1

Write the outputs for the algebraic function.

$(a + 5) \div 5$

25	→	?
45	→	?
5	→	?

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Varied Fluency 2

True or false?

$$4 \rightarrow 5a - 7 \rightarrow 12$$

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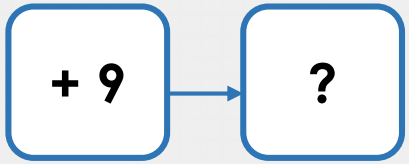
Varied Fluency 3

What is the missing function?



Input	Output
11	10
25	17
9	9

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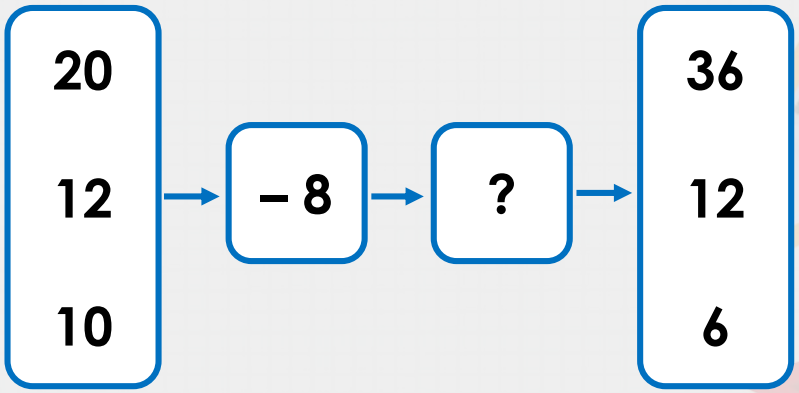
Varied Fluency 4

What is the algebraic rule for this function machine?



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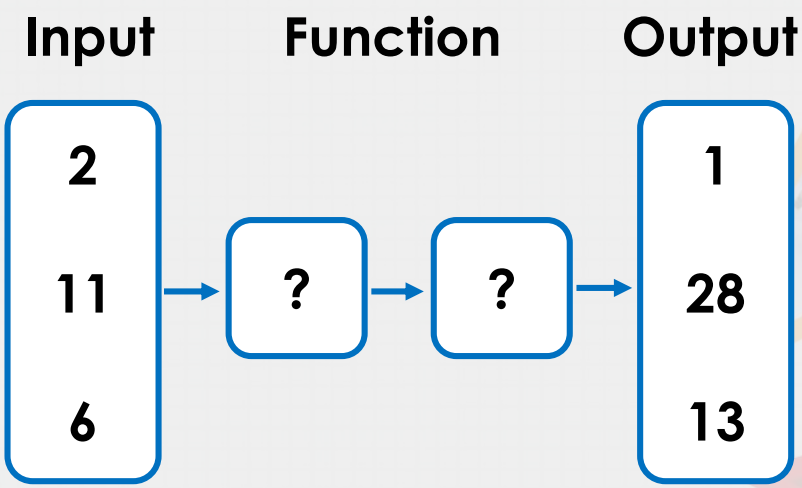
Problem Solving 1

Euan put some numbers into a function machine.



What is the output when the input is 8?

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Reasoning 1

True or false? Explain your answer.

Input	Output
3	9
15	13

I think that the function is x 2 and then add 3 because 3 x 2 then + 3 is 9.

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Problem Solving 2

Jaxon is using this function machine.

Function

Input → $\boxed{5a - 10}$ → Output

He puts a number into the function machine.
He then puts the output back into the machine.
He now has the output of 40.

What was Jaxon's original number?

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